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November 16, 2016

Employer:

I am writing in response to your email dated November 8, 2016, in which you request a deviation from *Occupational Health and Safety Act* General Regulation 91-191 Section 278(1) and 279(1)(b) that states:

Section 278(1) of Regulation 91-191 requires that flammable and explosive substances be drained from the containers before heat is applied to the container. In addition, Section 279(1)(b) states that "*An employer shall ensure that welding, cutting, burning or soldering operation is not undertaken on a container or pipe … containing … explosive and flammable substances*".

In your request, you provided me with a Design Work Sheet and MSDS and indicate that welding on a line containing Bunker C oil, is required. You also provide the following information:

- There is a 0.5'' line off our 2A Bunker C Oil pump with a pressure gauge on the end. It has a small leak at the top of the nippolet connection to the 6'' pipe. The 6'' pipe is completely welded with a check valve on the bottom of the vertical pipe.

- There is no way (it's impracticable) to drain the pipe completely and clean. The 6'' pipe will be drained slightly below where the repair is taking place.

Technical Background

- Removing the gauge assembly and repair at the top of the pipe nipple by welding;
- Welding is selected as method of repair per API 570 which references API 220;
- Burn Through prevention mitigated by using 3/32 7018 rod per 3.2 of API 220;
    - A106 piping Pl to Pl weld, min wall to be 0.25'' to be able to weld hot;
    - 3.2 of API 2201To remove oxygen above the oil level, the line will be purged with a constant presence of inert gas (nitrogen) to displace the oxygen from the pipe. API 2201 - 3.3;
- The company's procedure to be used in accordance with API-570 appendix Cl
    - Low-hydrogen E7018 3/32 electrode on A106
- Post inspection of all welds is required
- Welding per your company's procedure with qualified welder

Safety Requirements

- Contact WorkSafeNB prior to commencing work
- Clean around work area and isolate pipe lines
- Flame resistant coveralls and PPE on all workers
- Fire blankets below work and around piping and at least two fire extinguishers present
- Fire Monitors poised
- Communication with control room and operator present
- Hot Work Permit
- Tailboard form to be completed

In support of your request, you have also provided me with the following documentation:

1. Photo of leaking nipple area;
2. Weld Procedure Specification (Public Safety Registration No. 2693.7);
3. Boiler, Pressure Vessel and Pressure Piping Inspection and Test Plan;
4. Qualified Welder F4 Certificate for worker 1;
5. Qualified Welder F4 Certificate for worker 2;

In addition to the information above, I also considered the following information:

1. To obtain a Qualified Welder's Certificate, the New Brunswick Department of Public Safety requires applicants to have two (2) years of experience in the welding trade with at least one (1) year of experience on pressure piping, and must also pass a qualification test;

2. A Qualified Welder's Certificate authorizes the holder to fabricate and repair boilers and pressure vessels and pressure piping systems.

As provided by the authority of Section 3 (3) (b) of the *Occupational Health and Safety Act* and based on the information provided, a blanket deviation from Section 278(1) and 279(1) (b) is granted provided WorkSafeNB is notified prior to commencing hot work and the conditions you outlined in your request are adhered to.

Please note that a breach by your company of any of the conditions listed above could result in a reconsideration of this decision. By copy of this letter, I have advised WorkSafeNB of my decision. Please do not hesitate to contact me at 738-4107 should you have any questions regarding this decision.

Yours truly,

Chief Compliance Officer